comparable to biological-naïve patients, whereas switchers with intermediate and high concentrations responded worse regarding EULAR response criteria (respectively 74%, 72%, 50% and 52%; figure 1A) and SDAI remission (respectively 27%, 27%, 6%, 11%; figure 1B).

Conclusions: For the first time, we showed that the response rate of switchers with low adalimumab concentrations was comparable to biological-naïve patients, whereas switchers with intermediate and high concentrations responded worse. Therefore, drug concentration assessment may optimise switching, as it helps to identify those patients that may benefit from a second TNFi.

REFERENCE:

- [1] Jamnitski A, Bartelds GM, Nurmohamed MT, et al. The presence or absence of antibodies to infliximab or adalimumab determines the outcome of switching to etanercept. *Ann Rheum Dis* 2011;70:284–288.

Disclosure of Interest: M. l'Ami: None declared, J. Ruwaard: None declared, C. Kriekkaert Speakers bureau: Pfizer, M. Nurmohamed Grant/research support from: Pfizer, AbbVie, Roche, BMS, MSD, Mundipharma, UCB, Janssen, Menarini, Eli Lilly, Sanofi, and Celgene, Speakers bureau: Pfizer, AbbVie, Roche, BMS, MSD, Mundipharma, UCB, Janssen, Menarini, Eli Lilly, Sanofi, and Celgene, T. Rispens Grant/research support from: Genmab, Speakers bureau: Pfizer, AbbVie and Regeneron, G. Wolbink Grant/research support from: Pfizer, Speakers bureau: Pfizer, UCB, AbbVie, Biogen, BMS

DOI: 10.1136/annrheumdis-2018-eular.5238

OP0113

GRADUAL TAPERING TNF BLOCKERS VERSUS CONVENTIONAL SYNTHETIC DMARDS IN PATIENTS WITH RHEUMATOID ARTHRITIS IN SUSTAINED REMISSION: FIRST YEAR RESULTS OF THE RANDOMISED CONTROLLED TARA-STUDY

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Background: Clinical and radiographic outcomes in rheumatoid arthritis (RA) have improved enormously in the last two decades, due to early detection of the disease, early initiation of 'intensive' therapy and a treat-to-target approach. As a result, 50%–60% of early RA patients will achieve sustained remission during the first year of follow-up. In aforementioned cases current guidelines recommend to consider tapering treatment, but an optimal approach to gradually de-escalate conventional synthetic or biologic DMARDs (respectively csDMARDs and bDMARDs) is currently lacking.

Objectives: The aim of this study is to evaluate the effectiveness of two tapering strategies, namely gradual tapering of csDMARDs and anti-TNF therapy during one year of follow-up.

Abstract OP0113 – Figure 1 (A) Baseline characteristics and results after 12 months of follow-up of both tapering groups. (B) Cumulative flare over time, error bars indicate 95% confidence intervals. (C) Treatment at 12 months. Columns indicate the percentage of patients that tapered medication until the indicated amount of the original dose. (D) Mean DAS over time, error bars indicate 95% confidence intervals. (E) Mean HAQ over time, error bars indicate 95% confidence intervals. Abbreviations: ACPA; anti-citrullinated protein antibody, csDMARDs; conventional synthetic DMARDs, DAS; disease activity score, HAQ; health assessment questionnaire, RF; rheumatoid factor.

Methods: In this multicenter single-blinded randomised controlled trial RA patients in sustained remission for at least 3 consecutive months, defined as a DAS₂₈≤2.4 and a swollen joint count (SJC)≤1, which was achieved with csDMARDs and a TNF blocker were included. Eligible patients were randomised into gradual tapering csDMARDs followed by the TNF blocker or vice versa. Medication was tapered in three steps over the course of 6 months. Gradual tapering was done by cutting the dosage into half, a quarter and thereafter it was stopped. The primary outcome for the clinical effectiveness was disease flare defined as DAS44 >2.4 and/or SJC>1. Secondary outcomes were quality of life and functional ability.

Results: A total of 187 patients were randomly assigned to tapering csDMARDs (n=93) or tapering anti-TNF (n=94). Patients had an average symptom duration of 6.7 years and were predominantly female (66%) with an average age of 56.4 years (figure 1A). The cumulative flare ratio in the csDMARD and anti-TNF tapering group was respectively 32% and 41% (figure 1B), which corresponds with a hazard ratio of 0.91 (95% CI: 0.68 to 1.22, p=0.55). In the last 3 months the increase in cumulative flare ratio differs the most between the two groups. On the other hand, in 48% and 51% of patients respectively tapering csDMARDs or anti-TNF the medication could be completely withdrawn (figure 1C). Percentages of patients which are not completely tapered are higher than the flare ratios, due to loss of remission without a disease flare. Furthermore, mean DAS and mean HAQ over time, and after 1 year, did not differ between both tapering groups (figure 1D and E).

Conclusions: There were no significant differences in flare ratios, disease activity and functional ability between both tapering strategies during the first year of follow-up. Therefore, in RA patients who are in sustained remission we advise to taper anti TNF first, but before tapering therapy rheumatologists should take the risk of a disease flare and patient's wishes into account.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.1908

OP0114

ANA DEVELOPMENT IS ASSOCIATED WITH POOR RESPONSE TO BIOLOGICAL DISEASE-MODIFYING ANTI-RHEUMATIC DRUGS IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: It has been well known that anti-TNF-α treatment for patients with rheumatoid arthritis (RA) is associated with anti-nuclear antibody (ANA)